TEAM® Industrial Services

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**1.1. Product identifier**

| | |
|---|---|
| **Trade name or designation of the mixture** | RF-300 |
| **Registration number** | - |
| **Synonyms** | None. |
| **Product code** | 804-0005 |
| **Issue date** | 20-August-2013 |
| **Version number** | 00 |
| **Revision date** | 20-August-2013 |
| **Supersedes date** | - |

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

| | |
|---|---|
| **Identified uses** | Industrial Leak Sealant. |
| **Uses advised against** | None known. |

**1.3. Details of the supplier of the safety data sheet**

| | |
|---|---|
| **Manufacturer/Supplier** | Team Industrial Services, Inc. |
| **Address** | Postbus 37 4380 AA Vlissingen 3237<br>The Netherlands |
| **Telephone** | +31 (0) 118 48 58 00 |
| **Fax** | +31 (0) 118 48 58 86 |
| **e-mail** | Not available. |
| **Contact person** | Not available. |
| **1.4. Emergency telephone number** | +(61)-290372994, +1 703-527-3887 |

## SECTION 2: Hazards identification

**2.1. Classification of the substance or mixture**

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

**Classification according to Directive 67/548/EEC or 1999/45/EC as amended**

This preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** Xn;R48/20, Xi;R37/38-41

The full text for all R-phrases is displayed in section 16.

**Classification according to Regulation (EC) No 1272/2008 as amended**

**Health hazards**

| | | |
|---|---|---|
| Skin corrosion/irritation | Category 2 | H315 - Causes skin irritation. |
| Serious eye damage/eye irritation | Category 1 | H318 - Causes serious eye damage. |
| Specific target organ toxicity - single exposure | Category 3 respiratory tract irritation | H335 - May cause respiratory irritation. |
| Specific target organ toxicity - repeated exposure | Category 2 (Lung) | H373 - May cause damage to organs (Lung) through prolonged or repeated exposure. |

**Hazard summary**

| | |
|---|---|
| **Physical hazards** | Not classified for physical hazards. |
| **Health hazards** | Irritating to respiratory system and skin. Risk of serious damage to eyes. Also harmful: danger of serious damage to health by prolonged exposure through inhalation. |
| **Environmental hazards** | Not classified for hazards to the environment. |
| **Specific hazards** | Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases. Pre-existing pulmonary disorders, such as emphysema, may possibly be aggravated by prolonged exposure to high concentrations of quartz dust. |
| **Main symptoms** | Irritation of eyes and mucous membranes. Skin irritation. Cough. Irritation of nose and throat. Ingestion may cause irritation and malaise. |

**2.2. Label elements**

**Label according to Regulation (EC) No. 1272/2008 as amended**

**Contains:** Cristobalite, Quartz, Silicic acid, sodium salt

**Hazard pictograms**

**Signal word** Danger

**Hazard statements**
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H373 - May cause damage to organs (Lung) through prolonged or repeated exposure.

**Precautionary statements**

**Prevention**
P261 - Avoid breathing dust.
P280 - Wear protective gloves/eye protection/face protection.

**Response**
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Storage** P405 - Store locked up.

**Disposal** P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

**Supplemental label information** Not applicable.

**2.3. Other hazards** Not a PBT or vPvB substance or mixture.

## SECTION 3: Composition/information on ingredients

**3.2. Mixtures**

**General information**

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | INDEX No. | Notes |
|---|---|---|---|---|---|
| Mullite | 45-70 | 1302-93-8<br>215-113-2 | - | - | |
| **Classification:** **DSD:** - | | | | | |
| **CLP:** - | | | | | |
| Silicic acid, sodium salt | 10-30 | 1344-09-8<br>215-687-4 | - | - | |
| **Classification:** **DSD:** Xi;R37/38-41 | | | | | |
| **CLP:** Acute Tox. 4;H302, Skin Irrit. 2;H315, Eye Dam. 1;H318, STOT SE 3;H335 | | | | | |
| Cristobalite | 1-5 | 14464-46-1<br>238-455-4 | - | - | |
| **Classification:** **DSD:** Xn;R48/20 | | | | | |
| **CLP:** STOT RE 1;H372 | | | | | |
| Quartz | 1-5 | 14808-60-7<br>238-878-4 | - | - | |
| **Classification:** **DSD:** Xn;R48/20 | | | | | |
| **CLP:** STOT RE 1;H372 | | | | | |
| Silica, fume | 1-5 | 69012-64-2<br>231-545-4 | - | - | |
| **Classification:** **DSD:** - | | | | | |
| **CLP:** - | | | | | |

CLP: Regulation No. 1272/2008.
DSD: Directive 67/548/EEC.

**Composition comments** The full text for all R- and H-phrases is displayed in section 16. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In case of shortness of breath, give oxygen. Keep victim warm.

**4.1. Description of first aid measures**

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.

**Skin contact** Remove contaminated clothing and wash skin with soap and water. Get medical attention if irritation develops or persists.

**Eye contact** Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

**Ingestion** Immediately rinse mouth and drink plenty of water. Only induce vomiting at the instruction of medical personnel. Get medical attention if any discomfort occurs.

**4.2. Most important symptoms and effects, both acute and delayed** Irritation of eyes and mucous membranes. Cough. Irritation of nose and throat. Skin irritation. May cause damage to organs () through prolonged or repeated exposure. Ingestion may cause irritation and malaise.

**4.3. Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

## SECTION 5: Firefighting measures

**General fire hazards** The product is not flammable.

**5.1. Extinguishing media**

**Suitable extinguishing media** Water spray, foam, dry powder or carbon dioxide.

**Unsuitable extinguishing media** No restrictions known.

**5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may be formed.

**5.3. Advice for firefighters**

**Special protective equipment for firefighters** Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special fire fighting procedures** Use standard firefighting procedures and consider the hazards of other involved materials. Cool material exposed to heat with water spray and remove it if no risk is involved.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** Avoid inhalation of dust and contact with skin and eyes. Avoid prolonged and repeated contact.

**For emergency responders** Use personal protection as recommended in section 8 of the SDS.

**6.2. Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up** Collect dust using a vacuum cleaner equipped with HEPA filter. Collect in approved containers and seal securely. Containers must be labeled.

**6.4. Reference to other sections** For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Mechanical ventilation or local exhaust ventilation is required. Avoid inhalation of vapors/dust and contact with skin and eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Observe good industrial hygiene practices.

**7.2. Conditions for safe storage, including any incompatibilities** Keep in a cool, well-ventilated place. Keep away from food, drink and animal feeding stuffs. Store locked up. Store away from incompatible materials (See Section 10).

**7.3. Specific end use(s)** Industrial Leak Sealant.

## SECTION 8: Exposure controls/personal protection

**8.1. Control parameters**

**Occupational exposure limits**

**Austria. MAK List**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | MAK | 0,15 mg/m3 | Respirable dust. |

**Austria. MAK List**

| Components | Type | Value | Form |
|---|---|---|---|
| Quartz (CAS 14808-60-7) | MAK | 0,15 mg/m3 | Respirable dust. |
| Silica, fume (CAS 69012-64-2) | MAK | 4 mg/m3 | Inhalable fraction. |

**Belgium. Exposure Limit Values.**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,05 mg/m3 | Respirable dust. |
| Quartz (CAS 14808-60-7) | TWA | 0,1 mg/m3 | Respirable dust. |

**Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work**

| Components | Type | Value | Form |
|---|---|---|---|
| Mullite (CAS 1302-93-8) | TWA | 2 mg/m3 | |
| Quartz (CAS 14808-60-7) | TWA | 0,07 mg/m3 | Respirable fraction. |
| Silica, fume (CAS 69012-64-2) | TWA | 10 mg/m3 | Inhalable fraction. |
| | | 0,07 mg/m3 | Respirable fraction. |

**Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.**

| Components | Type | Value |
|---|---|---|
| Silica, fume (CAS 69012-64-2) | TWA | 2 mg/m3 |

**Czech Republic. OELs. Government Decree 361**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,1 mg/m3 | Respirable dust. |
| Quartz (CAS 14808-60-7) | TWA | 0,1 mg/m3 | Respirable dust. |
| Silica, fume (CAS 69012-64-2) | TWA | 4 mg/m3 | Dust. |

**Denmark. Exposure Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TLV | 0,15 mg/m3 | Total |
| | | 0,05 mg/m3 | Respirable. |
| Quartz (CAS 14808-60-7) | TLV | 0,3 mg/m3 | Total |
| | | 0,1 mg/m3 | Respirable. |
| Silica, fume (CAS 69012-64-2) | TLV | 2 mg/m3 | Respirable. |

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,05 mg/m3 | Respirable dust. |
| Mullite (CAS 1302-93-8) | TWA | 2 mg/m3 | |
| Quartz (CAS 14808-60-7) | TWA | 0,1 mg/m3 | Respirable dust. |
| Silica, fume (CAS 69012-64-2) | TWA | 2 mg/m3 | Respirable dust. |

**Finland. Workplace Exposure Limits**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,05 mg/m3 | Respirable. |
| Mullite (CAS 1302-93-8) | TWA | 2 mg/m3 | |
| Quartz (CAS 14808-60-7) | TWA | 0,05 mg/m3 | Respirable. |
| Silica, fume (CAS 69012-64-2) | TWA | 5 mg/m3 | |

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | VME | 0,05 mg/m3 | Respirable fraction. |
| Quartz (CAS 14808-60-7) | VME | 0,1 mg/m3 | Respirable fraction. |

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace**

| Components | Type | Value | Form |
|---|---|---|---|
| Silica, fume (CAS 69012-64-2) | AGW | 4 mg/m3 | Inhalable fraction. |

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,15 mg/m3 | Respirable. |
| Quartz (CAS 14808-60-7) | TWA | 0,15 mg/m3 | Respirable. |

**Iceland. OELs. Regulation 154/1999 on occupational exposure limits**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,15 mg/m3 | Total dust. |
| | | 0,05 mg/m3 | Respirable dust. |
| Mullite (CAS 1302-93-8) | TWA | 2 mg/m3 | |
| Quartz (CAS 14808-60-7) | TWA | 0,3 mg/m3 | Total dust. |
| | | 0,1 mg/m3 | Respirable dust. |
| Silica, fume (CAS 69012-64-2) | TWA | 2 mg/m3 | Respirable mist. |

**Ireland. Occupational Exposure Limits**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,1 mg/m3 | Respirable dust. |
| Quartz (CAS 14808-60-7) | TWA | 0,1 mg/m3 | Respirable dust. |
| Silica, fume (CAS 69012-64-2) | TWA | 6 mg/m3 | Total inhalable dust. |
| | | 2,4 mg/m3 | Respirable dust. |

**Italy. OELs**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,025 mg/m3 | Respirable fraction. |
| Mullite (CAS 1302-93-8) | TWA | 1 mg/m3 | Respirable fraction. |
| Quartz (CAS 14808-60-7) | TWA | 0,025 mg/m3 | Respirable fraction. |

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

| Components | Type | Value |
|---|---|---|
| Silica, fume (CAS 69012-64-2) | TWA | 1 mg/m3 |

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,05 mg/m3 | Respirable fraction. |
| Mullite (CAS 1302-93-8) | TWA | 1 mg/m3 | |
| Quartz (CAS 14808-60-7) | TWA | 0,1 mg/m3 | Respirable fraction. |

**Netherlands. OELs (binding)**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,075 mg/m3 | Respirable dust. |
| Quartz (CAS 14808-60-7) | TWA | 0,075 mg/m3 | Respirable dust. |

**Norway. Administrative Norms for Contaminants in the Workplace**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TLV | 0,15 mg/m3 | Total dust. |
| | | 0,05 mg/m3 | Respirable dust. |
| Quartz (CAS 14808-60-7) | TLV | 0,3 mg/m3 | Total dust. |
| | | 0,1 mg/m3 | Respirable dust. |
| Silica, fume (CAS 69012-64-2) | TLV | 1,5 mg/m3 | Respirable dust. |

**Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 2 mg/m3 | Total dust. |
| | | 0,3 mg/m3 | Respirable dust. |
| Quartz (CAS 14808-60-7) | TWA | 2 mg/m3 | Total dust. |
| | | 0,3 mg/m3 | Respirable dust. |

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,025 mg/m3 | Respirable fraction. |
| Quartz (CAS 14808-60-7) | TWA | 0,025 mg/m3 | Respirable fraction. |

**Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents**

| Components | Type | Value |
|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,1 mg/m3 |
| Quartz (CAS 14808-60-7) | TWA | 0,1 mg/m3 |
| Silica, fume (CAS 69012-64-2) | TWA | 0,3 mg/m3 |

**Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,15 mg/m3 | Respirable fraction. |
| Quartz (CAS 14808-60-7) | TWA | 0,15 mg/m3 | Respirable fraction. |
| Silica, fume (CAS 69012-64-2) | TWA | 4 mg/m3 | Inhalable fraction. |

**Spain. Occupational Exposure Limits**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,05 mg/m3 | Respirable fraction. |
| Quartz (CAS 14808-60-7) | TWA | 0,1 mg/m3 | Respirable fraction. |

**Sweden. Occupational Exposure Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,05 mg/m3 | Respirable dust. |
| Mullite (CAS 1302-93-8) | TWA | 1 mg/m3 | Total dust. |
| Quartz (CAS 14808-60-7) | TWA | 0,1 mg/m3 | Respirable dust. |

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,15 mg/m3 | Respirable dust. |
| Quartz (CAS 14808-60-7) | TWA | 0,15 mg/m3 | Respirable dust. |

**UK. EH40 Workplace Exposure Limits (WELs)**

| Components | Type | Value | Form |
|---|---|---|---|
| Cristobalite (CAS 14464-46-1) | TWA | 0,1 mg/m3 | Respirable. |
| Quartz (CAS 14808-60-7) | TWA | 0,1 mg/m3 | Respirable. |
| Silica, fume (CAS 69012-64-2) | TWA | 6 mg/m3 | Inhalable dust. |
| | | 2,4 mg/m3 | Respirable dust. |

**Biological limit values**

**Germany. TRGS 903, BAT List (Biological Limit Values)**

| Components | Value | Determinant | Specimen | Sampling time |
|---|---|---|---|---|
| Mullite (CAS 1302-93-8) | 200 µg/l | Aluminium | Urine | * |

* - For sampling details, please see the source document.

**Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices**

| Components | Value | Determinant | Specimen | Sampling time |
|---|---|---|---|---|
| Silica, fume (CAS 69012-64-2) | 25 % | red blood cell or total blood acetylcholinesterase activity (EC. 3.1.1.7.) | Reduction from individual baseline activity in red blood cells | * |

* - For sampling details, please see the source document.

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no-effect level (DNEL)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

**8.2. Exposure controls**

**Appropriate engineering controls** Mechanical ventilation or local exhaust ventilation is required. Provide easy access to water supply and eye wash facilities. Observe occupational exposure limits and minimise the risk of inhalation of dust.

**Individual protection measures, such as personal protective equipment**

**General information** Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** Wear approved safety glasses or goggles.

**Skin protection**

**- Hand protection** Wear protective gloves.

**- Other** Wear protective gloves. Wear suitable protective clothing.

**Respiratory protection** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P2).

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls** Environmental manager must be informed of all major releases.

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

**Appearance** Gray/Brown mixture of coarse to fine particles.

**Physical state** Wet trowable mortar.

**Form** Paste.

**Colour** Gray-brown.

**Odour** Not available.

**Odour threshold** Not available.

| | |
|---|---|
| **pH** | 7 - 9 |
| **Melting point/freezing point** | Not available. |
| **Initial boiling point and boiling range** | Not applicable. |
| **Flash point** | Not applicable. |
| **Evaporation rate** | Not applicable. |
| **Flammability (solid, gas)** | Not available. |
| **Upper/lower flammability or explosive limits** | |
| **Flammability limit - lower (%)** | Not available. |
| **Flammability limit - upper (%)** | Not available. |
| **Vapour pressure** | Not available. |
| **Vapour density** | Not available. |
| **Relative density** | Not available. |
| **Solubility(ies)** | Insoluble (in water). |
| **Partition coefficient (n-octanol/water)** | No data available.<br>Not applicable. |
| **Auto-ignition temperature** | Not applicable. |
| **Decomposition temperature** | Not available. |
| **Viscosity** | Not applicable. |
| **Explosive properties** | Not applicable. |
| **Oxidizing properties** | Not applicable. |
| **9.2. Other information** | |
| **Percent volatile** | 0 % |

## SECTION 10: Stability and reactivity

| | |
|---|---|
| **10.1. Reactivity** | The product is non-reactive under normal conditions of use, storage and transport. |
| **10.2. Chemical stability** | Material is stable under normal conditions. |
| **10.3. Possibility of hazardous reactions** | Will not occur. |
| **10.4. Conditions to avoid** | Avoid dust formation. |
| **10.5. Incompatible materials** | Strong oxidising agents. |
| **10.6. Hazardous decomposition products** | Carbon oxides. Silicon oxides. |

## SECTION 11: Toxicological information

| | |
|---|---|
| **General information** | Occupational exposure to the substance or mixture may cause adverse effects. |
| **Information on likely routes of exposure** | |
| **Ingestion** | Ingestion may cause irritation and malaise. |
| **Inhalation** | May cause respiratory tract irritation. |
| **Skin contact** | Causes skin irritation. |
| **Eye contact** | Causes serious eye damage. |
| **Symptoms** | Irritation of eyes and mucous membranes. Skin irritation. Cough. Irritation of nose and throat. |

**11.1. Information on toxicological effects**

| | |
|---|---|
| **Acute toxicity** | Ingestion may cause irritation and malaise. |

| **Components** | **Species** | **Test results** |
|---|---|---|
| Silicic acid, sodium salt (CAS 1344-09-8) | | |
| **Acute** | | |
| *Oral* | | |
| LD50 | Rat | 1280 mg/kg |

| | |
|---|---|
| **Skin corrosion/irritation** | Causes skin irritation. |
| **Serious eye damage/eye irritation** | Causes serious eye damage. |

**Respiratory sensitisation** No data available.

**Skin sensitisation** Not a skin sensitiser.

**Germ cell mutagenicity** No data available.

**Carcinogenicity** Prolonged breathing of high levels of crystalline silica can cause silicosis. Also, airborne crystalline silica is possibly carcinogenic to humans.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

| | |
|---|---|
| Cristobalite (CAS 14464-46-1) | 1 Carcinogenic to humans. |
| Quartz (CAS 14808-60-7) | 1 Carcinogenic to humans. |

**Reproductive toxicity** No data available.

**Specific target organ toxicity - single exposure** May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure** May cause damage to organs (Lung) through prolonged or repeated exposure by inhalation.

**Aspiration hazard** Due to the physical form of the product it is not an aspiration hazard.

**Mixture versus substance information** Not available.

**Other information** Not available.

## SECTION 12: Ecological information

**12.1. Toxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components | | Species | Test results |
|---|---|---|---|
| Silicic acid, sodium salt (CAS 1344-09-8) | | | |
| **Aquatic** | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 247 mg/l, 4,2 days |
| Fish | LC50 | Western mosquitofish (Gambusia affinis) | 1800 mg/l, 96 hours |

**12.2. Persistence and degradability** No data available.

**12.3. Bioaccumulative potential** No data available.

**Partition coefficient n-octanol/water (log Kow)** No data available.

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** No data available.

**Mobility in general** No data available.

**12.5. Results of PBT and vPvB assessment** Not a PBT or vPvB substance or mixture.

**12.6. Other adverse effects** No data available.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

**Residual waste** Dispose of in accordance with local regulations.

**Contaminated packaging** Dispose product packaging in accordance with local authority requirements taking into account characteristics of the packaging material.

**EU waste code** 08 04 09*

**Disposal methods/information** Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Recover and reclaim or recycle, if practical.

## SECTION 14: Transport information

**ADR**

Not regulated as dangerous goods.

**RID**

Not regulated as dangerous goods.

**ADN**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

This substance/mixture is not intended to be transported in bulk.

## SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulations**

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I**

Not listed.

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA**

Not listed.

**Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended**

Not listed.

**Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Silicic acid, sodium salt (CAS 1344-09-8)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not regulated.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding**

Not regulated.

**Other EU regulations**

**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not regulated.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Not listed.

**Directive 94/33/EC on the protection of young people at work**

Not listed.

**Other regulations**

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended and respective national laws implementing EC directives. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. Young people under 18 years old are not allow to work with this product according to the EU Directive 94/33/EC on the protection of young people at work.

**National regulations**

Follow national regulation for work with chemical agents.

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

| | |
|---|---|
| **List of abbreviations** | DNEL: Derived No-Effect Level.<br>PNEC: Predicted No-Effect Concentration. PBT:<br>Persistent, bioaccumulative and toxic. vPvB:<br>Very Persistent and very Bioaccumulative. DSD:<br>Directive 67/548/EEC.<br>CLP: Regulation No. 1272/2008. |
| **References** | Registry of Toxic Effects of Chemical Substances (RTECS) |
| **Information on evaluation method leading to the classification of mixture** | Not available. |
| **Full text of any statements or R-phrases and H-statements under Sections 2 to 15** | R37/38 Irritating to respiratory system and skin.<br>R41 Risk of serious damage to eyes.<br>R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.<br>H302 Harmful if swallowed.<br>H315 Causes skin irritation.<br>H318 Causes serious eye damage.<br>H335 May cause respiratory irritation.<br>H372 Causes damage to organs through prolonged or repeated exposure. |
| **Training information** | Not available. |
| **Disclaimer** | The information in the sheet was written based on the best knowledge and experience currently available. |